vision

CHEV WILKINSON, ©GETTY IMAGES

a vision for the future

Today, the Bay Area's surface transportation system is poorly maintained, seriously overcrowded at peak hours and woefully underfunded. These conditions have been decades in the making, and cannot be reversed overnight. But they *can* be changed.

This Transportation 2030 Plan charts a 25-year course for transforming the Bay Area transportation system — and fulfilling a vision in which potholes on the streets, roads and highways are rare exceptions and not common occurrences; in which the region's bridges prove mightier than the strongest earthquake; in which all the doors on all the buses open and close; in which train station escalators and ticket machines are no longer adorned with "out of order" signs; and in which broken sidewalks no longer bedevil pedestrians, wheelchairs or baby strollers. By 2030, an electronic fare card will allow millions of passengers each day to ride any bus, train, ferry or cable car in the Bay Area; electronic toll collection will automate hundreds of thousands of transactions daily and bring some relief to traffic-choked toll plazas; and real-time information about conditions on every highway and transit route in the region should be available on demand via whatever portable electronic device we'll carry around in the future.

PETER CADE

"MOBILITY FOR THE NEXT GENERATION DEPENDS ON THE BOLD STEPS WE TAKE TODAY."

The Transportation 2030 vision also embraces carefully selected additions to the Bay Area transportation system. These include extending BART to San Jose and Santa Clara; unclogging some of the region's most notorious highway bottlenecks (including the Cordelia Junction, Novato Narrows and Caldecott Tunnel); and completing a network of high-occupancy-vehicle lanes to whisk express buses, carpoolers and even toll-paying solo drivers throughout the region. (Thanks to legislation signed by Gov. Schwarzenegger in 2004, solo drivers will soon be able to pay their way into carpool lanes in Alameda and Santa Clara counties, an important test bed for the congestion-busting potential of this road-pricing concept.)

All these things are possible. But only with a frank recognition of the hard work required, a willingness to experiment and innovate, and plenty of additional dollars. The Transportation 2030 Plan makes a significant down payment toward restoring the transportation infrastructure we've inherited, coaxing maximum safety and productivity from our existing system and endowing the greatest possible legacy for future generations. But additional installments — of both political and financial capital — will be required to fully realize the Transportation 2030 vision.

Another challenge will be determining where close to two million additional people will live and where more than a million new jobs will be located. In preparing the Transportation 2030 Plan, MTC found strong public support for better connecting transportation and land-use decisions, developing more convenient

> "THE FIRST TASK IS TO REPAIR AND RESTORE THE BAY AREA'S EXISTING TRANSPORTATION ASSETS."

transportation options, and pursuing greater regional cooperation on issues surrounding the location of new development. The bottom line is that the Bay Area must accommodate more of its growth in existing urban and suburban areas, which are already well served by the region's road and public transit networks.

The Transportation 2030 Plan proposes three broad approaches to enhance mobility and improve access to schools, jobs, medical services and other vital destinations for Bay Area residents. These three strategies can be summed up in six words: **adequate maintenance, system efficiency** and **strategic expansion.**

Adequate Maintenance

The first task is to repair and restore the Bay Area's existing transportation assets, some of which date back to the beginnings of the region's urbanization. This rich legacy — ranging from the state highway system to major rail networks to the local street grid — has fallen into serious disrepair. We are proposing to devote 80 percent of the plan's budget to operate and maintain the existing transportation system. Yet despite this heavy "fix it first" emphasis, it would take an additional $17 billion just to rehabilitate our public transit, highway and roadway networks to top condition. This repair shortfall far exceeds all the revenue that we expect will be available for new expansion projects over the next 25 years. In other words, we could virtually shut down the Bay Area's construction program for over two decades and still lack sufficient funds to adequately maintain the facilities that exist today.

The gasoline tax has been the traditional source of funding for filling potholes and replacing worn-out buses. It's no wonder that we have fallen behind in these tasks, since neither the federal nor state gas tax rate has been increased in over a decade. Indeed, the purchasing power of the combined federal and state tax (currently 36 cents per gallon) has declined by 25 percent since 1990. Sober assessment of the political landscape, however, shows that much higher gas taxes simply are not on the horizon. Not only has more than a decade passed since legislators last raised fuel taxes, but attempts to adjust them in the 2004 congressional and state legislative sessions ended in failure, and persistently high pump prices for gasoline may foreclose debate about raising gas taxes for at least the next several years. This increasingly will force local governments to meet the transportation funding responsibilities abdicated by Congress and the Legislature. Therefore, it is imperative that Bay Area counties seeking to extend or enact local sales tax measures for transportation include a healthy set-aside for ongoing maintenance activities.

GEORGE DRAPER

A renewed financial commitment to infrastructure repair should *not* come without strings attached. Cities that receive additional local road funding should meet "maintenance of effort" standards to ensure that they don't shift existing funding out of local roads to other municipal programs. Transit operators that receive repair funds should likewise be required to adjust passenger fares and other local revenues to keep pace with inflation so their repair backlogs can be stabilized and reduced. No public agency should receive additional funds unless it agrees to support and implement measures to improve the efficiency of the transportation network (described in the next section of this chapter). New funding is urgently needed for basic repair of our roads, bridges and transit systems. But so too is a new focus on accountability and transparency in how those funds are spent.

System Efficiency

The traffic congestion that plagues the Bay Area and most major metropolitan areas throughout the United States has two principal causes. First, at many well-known bottlenecks like the Bay Bridge toll plaza and freeway interchanges, there are simply too many cars trying to squeeze through too small a space at the same time. Demand exceeds capacity, and delays result. Second, up to 50 percent of traffic congestion is caused not by lack of capacity, but by accidents, stalls and other on-road incidents that frequently tie up traffic for hours each day. By improving the response time in dealing with these traffic mishaps — and better yet, avoiding some of them altogether — we can make great progress in increasing safety and reducing delays.

Take a typical freeway collision: As soon as the accident occurs, traffic slows. The longer the disabled cars sit on the freeway, the farther the backup stretches. Before long, even emergency vehicles have a hard time reaching the scene to deal with any injuries and clear the lanes. Now imagine if the accident had been detected seconds after it occurred by roadside sensors or cameras overhead. Imagine if a roving tow truck had been immediately dispatched from a nearby location to clear the scene. And imagine if changeable message signs and broadcasts on the 511 telephone system had alerted travelers to consider an alternate route around the budding delay.

This is hardly the stuff of science fiction. All these technologies exist today on portions of the Bay Area freeway system. But several steps to better system efficiency remain. We must complete instrumentation of the freeway network so Caltrans and the California Highway Patrol (CHP) can direct motorist assistance where it's needed most. We must expand the Freeway Service Patrol so more tow trucks are working to aid stranded motorists. And we must build out the 511 phone and Web traveler information systems so drivers and transit patrons can make smarter travel choices based on real-time information. The Transportation 2030 Plan brings us closer to these goals.

GEORGE DRAPER

> "UP TO 50 PERCENT OF TRAFFIC CONGESTION IS CAUSED NOT BY LACK OF CAPACITY, BUT BY ACCIDENTS, STALLS AND OTHER ON-ROAD INCIDENTS."

Techniques such as these also can help us cope with recurring traffic congestion during rush hours. One strategy to reduce freeway delay is to meter entering vehicles with traffic lights at freeway on-ramps. These ramp meters are ubiquitous in Southern California and quite common in our own Silicon Valley. Yet, fear of possible "spillover" traffic on adjacent city streets has stymied wider deployment in the Bay Area. MTC will work with Caltrans, congestion management agencies and the affected local communities to optimize flow and minimize delay on freeways and local streets. Another impediment to congestion relief is poor communication among emergency responders to major highway accidents, where improved coordination between the CHP, local police and fire departments, and even the coroner's office, can speed medical assistance and the reopening of affected traffic lanes. MTC will seek solutions here too, if necessary with a change to state law.

Fortunately, many of these "intelligent transportation" strategies come at relatively low cost — especially when compared to major road or transit expansion projects. So, while new funding is needed, it is not the major obstacle to full-scale implementation. The bigger challenge is overcoming the institutional tangle of multiple owners

JOHN BENSON

and operators of the transportation system so their unifying mission becomes maximizing the safety and effectiveness of the system as a whole — not just the piece they happen to own. This kind of collective political leadership has been lacking up to now. The Bay Area transportation community must rededicate itself to an enterprise of partnership and collaboration for our common constituents.

But collaboration only goes so far. It's difficult to say what would be an "ideal" number of public transit operators for a region the size of the Bay Area, but the existence of 26 separate agencies is not the right answer. In addition to promoting better connections between these various systems — such as with the TransLink® universal fare card — the time has come to seriously evaluate the consolidation of these two dozen operators into a smaller and more manageable number of agencies. This would reduce administrative redundancy and duplicative expense as well as respond to the public's call for a more seamless transit system. Following a thorough review of costs and benefits, Napa County merged all six of its municipal transit operations under a single agency, and several East Bay suburban bus agencies are studying efficiencies that might be generated through combining parts of their operations. Other counties that are now served by several transit agencies, such as Solano and Sonoma counties, should proceed in this direction.

Strategic Expansion

It is straightforward enough to say that any transportation plan should seek to maintain what we've already built and operate that infrastructure as efficiently as possible. These are fairly uncontroversial objectives — although much work lies ahead to accomplish them. It's another thing altogether to strive for consensus over how, where and under what conditions we should expand the Bay Area's road, transit and bicycle/pedestrian networks. Ever since the "freeway revolt" in the 1960s, the region has been engaged in a long-running debate about expanding transportation capacity, with ever-changing factions vying for dominance. What began as a highway vs. transit fight has degenerated into combat over rail vs. bus transit, or even build something vs. build nothing squabbles, for fear that any capacity expansion will inexorably lead to more growth and congestion. After nearly half a century of angry words, it's time to break free of this modal conflict and try to establish a common ground for moving forward.

Let's begin with a few facts. First, the era of major freeway construction — the building of the Interstate system — is over. During the next two decades, the Bay Area is expected to spend less on new highway projects than any other large urban area in the country (only 4 percent of total spending). For local transit advocates to pretend otherwise — as many persist in claiming — is to ignore the truth. This is not to say that further high-occupancy-vehicle (HOV) lane construction, new auxiliary lanes to reduce merging conflicts and freeway interchange improvements are unwarranted. Many of these types of projects are needed and will be built. But, on a regional scale, they are mostly tinkering at the margins of the mainline freeway capacity that exists today.

Second, transit expansion is no panacea either. In many parts of our region, rail service will never make economic or transportation sense — even with substantial increases in housing density over present trends. Rapid or express bus service will be a much more cost-effective alternative in these low-density areas, but there are limits to the appropriateness of bus transit as well. Every new bus requires a driver and fuel, and creates a long-term claim on operating funds to subsidize the service. The greatest wasted "mass transit" resource in our region remains the empty seats in

most commuters' automobiles. If more workers throughout the region followed the model of casual carpooling pioneered in the Bay Bridge corridor, we would have a powerful new tool to reduce traffic congestion *at no taxpayer cost.*

Finally, expansion of any travel mode occurs in multiple contexts: physical, social and financial, to name a few. It is within these contexts, perhaps, that a new consensus on capacity expansion can be forged. MTC, in adopting its Resolution 3434 rail and bus expansion program in 2001, acknowledged the physical limits of building additional freeway lanes in several congested corridors and opted to provide a rail or bus transit alternative to augment capacity. The Transportation 2030 Plan continues this $11.8 billion commitment in these corridors.

Since the adoption of Resolution 3434, MTC and four other regional agencies have adopted a Smart Growth Strategy that promotes future residential and commercial development clustered around existing and planned transit hubs. Recognizing the development impact that rail transit investment can have on the physical environment, the Transportation 2030 Plan conditions Resolution 3434 discretionary fund allocations on local governments taking steps to implement the Smart Growth Vision through general plan amendments and zoning changes. This new approach both responds to the Bay Area's acute housing shortage and gets the most ridership "bang for the buck" out of these costly rail transit extensions.

In the social context, the Transportation 2030 Plan expands mobility options for traditionally underserved communities: elderly, disabled and low-income residents with limited access to an automobile; and bicyclists and pedestrians. There is a clear gap in personal mobility based on income. People with disabilities face many travel obstacles. And given the "graying" of the Bay Area's population over the next 25 years, the needs of elderly travelers are likely to grow and command our attention every bit as much as headline-grabbing traffic congestion. After all, commuting to work will account for only 27 percent of all trips in the Bay Area in 2030.

The "lifeline" mobility needs of low-income travelers can in some cases be met with improvements to fixed-route transit service, in other cases by demand-responsive paratransit, and in still others by car-sharing or car purchase-assistance programs. Any of these solutions will require new funding, however, and the Transportation 2030 Plan makes a $216 million down payment to get the region started.

"THE TRANSPORTATION 2030 PLAN BREAKS NEW GROUND BY SETTING ASIDE $200 MILLION IN REGIONAL FUNDS FOR FILLING GAPS IN THE BICYCLE PLAN NETWORK AND IMPROVING PEDESTRIAN FACILITIES."

JOHN L. KIM

Bicycle and pedestrian travel are two of the oldest forms of transportation in America, yet it has been a struggle for these modes to be given equal access to our transportation facilities. Fortunately, the tide is turning. The three new transbay bridges just finished or under construction — Carquinez, Benicia-Martinez and the Bay Bridge east span — all include bicycle/pedestrian paths. And a study is under way to evaluate access options on the Richmond-San Rafael Bridge. Building on MTC's 2001 Regional Transportation Plan, which for the first time included a regional bicycle plan mapping out a network of major paths and trails, the Transportation 2030 Plan breaks new ground by setting aside $200 million in regional funds for filling gaps in the bicycle plan network and improving pedestrian facilities.

The financial context is what makes any type of expansion possible, and the constraints in this arena are formidable. They include legislative reluctance to raise the gas tax; the constitutional requirement for a two-thirds vote to approve local revenue measures; and the growing reliance on non-user fee revenue sources, such as general sales taxes, to finance transportation improvements. Another financial constraint can be found in the Transportation 2030 Plan itself. Federal law requires the plan to be based on a realistic forecast of future revenues, and the total cost of all projects in the plan cannot exceed this reasonable estimate. So while the Transportation 2030 Plan details a comprehensive vision for improving the performance of the Bay Area transportation network, current revenue projections are sufficient to realize only a part of this vision.

Market Forces Are Key To Success

To go beyond financial constraints and fulfill the Transportation 2030 vision of adequate maintenance, more efficient operation and strategic expansion, the Bay Area must forge a regional consensus around a set of new revenue measures that can be realistically delivered in the next five to 10 years. An increase in the state gas tax is more than warranted after a decade of neglect, and California now ranks dead last among the 50 states in per-capita spending on highways. At the very least, the state gas tax should be indexed with inflation — as it is in 11 other states — to prevent the continued erosion of its purchasing power over time.

> **"IN THE LONG RUN, BUILDING UNPRICED ROAD CAPACITY IN A GROWING REGION IS FIGHTING A LOSING BATTLE WITH TRAFFIC CONGESTION."**

SAN DIEGO ASSOCIATION OF GOVERNMENTS

The local revenue dilemma is more complicated. County sales taxes have been the bulwark of the Bay Area's transportation expansion program in the face of state and federal inaction on the fuel tax. Yet by severing the connection between the road user and the system he or she uses, sales taxes, property taxes, general fund revenue and other non-user fee sources fail to send the proper price signal to the motorist to encourage wise use of the highway network. In the private economy, when a good becomes scarce, its price rises to balance supply and demand. A transportation system financed with non-user revenue lacks this critical balancing mechanism. In the long run, building unpriced road capacity in a growing region is fighting a losing battle with traffic congestion.

To reintroduce pricing signals into the transportation system, the Transportation 2030 Plan advocates development of a high-occupancy/toll (HOT) network that would convert the Bay Area's existing HOV lanes to HOT lanes. Carpools, vanpools and transit vehicles would continue to enjoy free passage in the HOT lanes, but other motorists could pay a fee to use them. The new toll revenue would be used to finance construction of HOT lanes where gaps exist in the network, and to operate additional transit and ride-share services for other corridor travelers. Because some commuters cannot afford to buy their way out of traffic gridlock, a portion of the HOT lane revenues could be used to subsidize transportation services for low-income travelers in the same corridor.

The transition from pump-based fuel taxes to direct road tolling will not be an easy one. But the time to begin that shift is now. The HOT network would offer improved mobility not only to those motorists willing to pay the fee, but also to transit and ridesharing patrons who would benefit from a more comprehensive diamond-lane system. HOT lanes already are successfully deployed in Orange and San Diego counties as well as in Houston and Minneapolis. As mentioned earlier, Alameda and Santa Clara counties recently secured state legislative approval to test the HOT lane concept in the next few years. MTC supports changes in state and federal law that would permit implementation of a comprehensive HOT network throughout the Bay Area.

A second potential source of new user-fee revenue is a regional gasoline tax — the only untapped discretionary revenue source within MTC's current authority to impose, subject to approval by the region's voters. Whether Bay Area voters are any more likely than the state Legislature to approve a gas tax is anybody's guess. But we'll never know unless we try. If the Legislature doesn't want to raise the current gasoline tax, it should at least change MTC's enabling statute to permit the Bay Area electorate to approve a regional gasoline fee with a *simple majority vote* — the standard successfully met in the passage of the Regional Measure 2 toll hike in March 2004.

As user charges, the regional gas fee and the HOT lane tolls have the potential not only to finance additional system *supply* but to influence *demand* for scarce roadway capacity. And as sources of regional discretionary revenues, they can be focused on elements of the Transportation 2030 investment agenda — such as system efficiency, livable communities and freight movement — that receive less attention in local tax revenue measures.

"TOMORROW'S TRANSPORTATION CHALLENGES SHOULD PROVE NO MATCH FOR A COMMITTED CITIZENRY WITH THE DETERMINATION, THE VISION — AND THE COURAGE — TO OVERCOME THEM."

The goals of the Transportation 2030 Plan emphasize a safe and well-maintained transportation system; a reliable commute; access to mobility for low-income, senior and disabled travelers; more livable communities; clean air for the region's residents; and efficient freight travel to ensure the Bay Area's economic competitiveness. At present, we are losing ground on most of these objectives. This is especially true in the area of goods movement, which too many residents still view as more of a nuisance to their personal travel than a necessity for the region's economic prosperity. Yet, better results are possible with new approaches, new technology and new resources.

Throughout its history, the Bay Area has recovered from calamitous earthquakes, floods and fires. We are a resilient region. Tomorrow's transportation challenges should prove no match for a committed citizenry with the determination, the vision — and the courage — to overcome them. Mobility for the next generation depends on the bold steps we take today.

CHRISTOPHER SPRINGMANN

MTC welcomes your comments on the Transportation 2030 Plan and encourages input from the Bay Area public at all times. To stay on top of MTC activities or to keep abreast of upcoming public meetings, you can visit our Web site at www.mtc.ca.gov. If you can't come to a meeting, you can call our Public Information Office at 510.464.7787, or send your comments via e-mail, fax or mail:

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Public Provides Steady Direction for Transportation 2030

The Transportation 2030 Plan is the product of an unprecedented effort by MTC to involve people from all walks of life in the planning process. Transportation 2030 kicked off with a regional summit in June 2003 that drew an overflow crowd of nearly 500 to San Francisco's historic Palace Hotel. A sophisticated electronic voting system enabled summit attendees to immediately register their opinions on a range of transportation-related subjects, helping to spur debate and identify key issues.

The public involvement campaign also included:

- A telephone poll of 3,600 residents from throughout the Bay Area
- 34 public workshops, with a special focus on input from lower-income and minority communities
- A special multi-interest workshop with representatives from nine separate community-based organizations and each of MTC's three advisory committees
- County-oriented workshops and Web outreach hosted by the region's congestion management agencies
- Six focus groups with a cross-section of the public (including residents of all nine counties) to allow more in-depth discussion of the major choices and tradeoffs
- Three interactive, online Web surveys taken by over 1,900 visitors to the MTC Web site
- An invitation for members of the public to propose new transportation projects and programs directly to MTC — resulting in more than 40 new project ideas submitted for MTC's project performance evaluation
- Establishment of three task forces representing a variety of interest groups and charged with developing specific recommendations on improving access to mobility, bicycle/pedestrian travel and the transportation/land-use connection. The task forces met more than a dozen times at sites around the region.

Different Audiences, Different Methods

Collaboration between MTC and community-based organizations attracted hundreds of residents to workshops held in San Francisco's Tenderloin and Bayview/Hunters Point neighborhoods, East San Jose, Milpitas, the Canal District of San Rafael, Concord's Monument Corridor, and Oakland's San Antonio and East Oakland neighborhoods. Workshop materials were printed in Spanish, Chinese and Vietnamese as well as English, and included response cards for a shorter, print version of the Budget Challenge featured on the MTC Web site. Translators were on hand at most meetings to facilitate participation by non-English-speaking residents, and some groups even provided on-site childcare to make it easier for parents to take part.

The nearly two dozen other public meetings on Transportation 2030 held by MTC during the fall of 2003 included workshops targeted toward business and labor interests, environmental advocates, Bay Area bicycle coalitions, tribal governments and the League of Women Voters of the Bay Area. Whether held in a low-income neighborhood or a high-tech business complex, nearly every workshop was attended by one or more MTC commissioners — allowing members of the public to talk directly with policymakers.

Following release of the *Draft Transportation 2030 Plan*, in November 2004, members of the public offered comments at workshops in San Jose, San Rafael and Oakland. The primary purpose of these workshops and a companion Web survey was to hear from the public about a series of investment strategies and proposed actions that could be taken in order to implement those strategies.

Plan Reflects Community Input

The Transportation 2030 Plan reflects what MTC heard from the people of the Bay Area by including six new goals, a five-point platform for transportation and land-use integration, and a carefully balanced investment strategy. The plan increases investment for both road and transit shortfalls, sustains several important regional programs at levels established in the previous 2001 Regional Transportation Plan, and provides funding for the first time for a regional bicycle/pedestrian network and a Lifeline Program to meet the mobility needs of low-income residents.

MTC identified performance measures to gauge progress toward accomplishing a set of goals laid out in the Transportation 2030 Public Outreach Plan. Evaluation forms, available in English and three other languages, were handed out at the end of each public meeting, asking participants to evaluate the quality of outreach. The success of the Transportation 2030 outreach effort was recognized by the U.S. Department of Transportation, which in 2004 awarded MTC the "Transportation Planning Excellence Award for Public Involvement, Education and Outreach."

MTC's Transportation 2030 outreach effort is further summarized in a series of supplementary reports. *See pages 137–138 for more information*.